
United States Court of Appeals

FOR THE NINTH CIRCUIT

No. 15,057

MOIST COLD REFRIGERATOR Co., INC., a corporation,
Appellant,
vs.

ADMIRAL CORPORATION, a corporation, and
AMANA REFRIGERATION, INC., a corporation,
Appellees.

PLAINTIFF-APPELLANT'S REPLY BRIEF

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ERRATA IN PLAINTIFF'S MAIN BRIEF

Page IV line 10, change "210" to — 201

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PLAINTIFF-APPELLANT'S REPLY BRIEF

Defendants introduce their Brief (D. Br. 1-3) with an officious and unnecessary defense of Judge Solomon. Our Brief was a vigorous attack on the decision below, not on the Judge who made it. Plaintiff's appeal is the contrary of *ad hominem*: we urge reversal for clear error of law. But defendants' introductory argument is itself *ad hominem*; it seeks to enlist on defendants' side sympathy for the trial Judge, whereas neither the Judge personally nor sympathy for him has anything to do with the merits.

Defendants' talk about Judge Solomon betrays lack of confidence in their defense on the issues. We prefer to argue the issues, and shall continue to do so in this Reply, wherein we demonstrate that defendants' position is based on misstatement of many material facts, disregard of others, and complete failure to face up to the governing law, including the rule, to which they give only lip service, that the verdict of the jury has resolved evidential conflicts in plaintiff's favor.

The Defense of Anticipation Was Properly Rejected by the Jury and the Trial Judge

Of the four claims in the Potter patent, defendants argue that two, claims 1 and 2, were anticipated. This defense, rejected by the trial Judge as well as the jury, asserts full anticipation by, respectively, Anderson and Davenport of the entire Potter combination.*

(1) Potter, Unlike Anderson and Davenport, Solved The Dual Humidity Problem.

The Potter patent taught a direct expansion refrigerator in which refrigerant under pressure pre-set to evaporate in both evaporators at below 32° F, simultaneously and

* That elements of the combination are separately old does not, of course, show anticipation. *Refrigeration Engineering Co. v. York*, 9th Cir. 168 F2d 896, 899.

continuously maintains below 32° F on the heat-exchange surface for the freezing compartment and above 32° F on the heat-exchange surface for the cooling compartment. Thus the Potter patent solved the dual humidity problem in an all-purpose household refrigerator, eliminating defrosting, since the “slight amount of frosting where the cooling coil 25 enters the compartment 14” (P.Ex. 2, col. 6, lines 1-5) was of no practical moment. The Potter patent carries a mandate against objectionable frosting; and the refrigerators made under the patent are free therefrom (P.Br. 22 *et seq.*)*. For a complete refutation of defendants’ assertion (D. Br. 26) to the contrary see the references under points 1, 2, 3 and 10 in Appendix B, our main Brief, particularly R. 108, 254, 430, 437, 515, 518 and additionally R. 761 and 1336-7. See *Sanitary Dist. v. Activated Sludge*, 7th Cir., 90 F2d 727, 729; *Rynear v. Evans*, 83 Fed. 696, 697.

To show anticipation by Anderson and Davenport, defendants have the burden of establishing that they likewise solved this dual humidity problem. Now the indisputable fact is, that there is no proof at all on the actual operation of any refrigerator built according to the teaching of Anderson or Davenport. Moreover, the *Anderson patent* (D. Ex. 105) and the *Davenport patent* (D. Ex. 107) are completely silent on the humidity problem and do not in any way purport to solve it. At most, therefore, the position that Anderson and Davenport anticipated is the merest conjecture, untenable in fact and in law. *Pointer v. Six Wheel Corp.*, 9th Cir., 177 F 2d 153, 160-162. Defendants seek to show the contrary by a semantic confusion between a ‘cooling’ compartment and a ‘moist cold’ compartment. While Anderson and Davenport show ‘cooling’ compartments, *they were not shown in the patents, or in the record, to be moist cold*. The assertions otherwise in defendants’ Brief are based on distortions of the Anderson and Davenport patents, to which we now turn.

* There are from 30 to 60 fins in the refrigerators Potter built (R. 769, 771) and that there was “some frosting on one and I believe two of the fins . . . a slight frost” (R. 1366) is *de minimis*.

(2) Defendants Distort Anderson and Davenport.

(a) Anderson

In defendants' discussion of the Anderson patent, they quote from it only twice. At D. Br. 25 in a footnote, the claim quoted is not asserted even by defendants to have any bearing on non-frosting and it plainly does not. At D. Br. 29, defendants quote Anderson as mentioning "dripping from the coil" and defendants argue from this:

"obviously it was not contemplated that this coil 40 would '*necessarily*' be at a temperature below 32° F. but that it would *normally* be above 32° F. because that is the only condition under which dripping could take place." (Italics supplied)

This is false, since dripping would take place *when the motor was not running*, whether on a defrost cycle, or shut down for defrosting, or for any other reason (R. 623-4). Then, no refrigerant would reach the evaporator in the cooling compartment, of course; its surface temperature would gradually rise above 32° F. and the frost accumulated on said coil would tend to melt and drip therefrom.

Defendants argue (D. Br. 26):

"Anderson is 'nonfrosting' in the same sense as Potter. Both frost to a degree, depending on the adjustment of the adjustable expansion valve (33 in Anderson; 23 in Potter)".

This is just plain wrong with respect to both Potter and Anderson. Potter solved the humidity problem, not by adjustment of the expansion valve, but by a structural innovation: two balanced coils with different surface extensions, respectively, for the freezing and the cooling compartments (R. 761-2). And Anderson did not solve the humidity problem, for the reason that he had only a bare duct evaporator for both those compartments. With such bare duct evaporator, *no adjustment of the expansion valve in Anderson will solve the humidity problem.* (i) Suppose the pressure is set, by adjustment of the expansion

valve, to evaporate refrigerant at below 32° F., to get a coil surface temperature of below 32° F for the freezing compartment. A like temperature will obtain on the surface of the same coil in the cooling compartment up to whatever point in the coil the liquid refrigerant reaches and evaporates, with the consequent dehydrating effect (R. 825-6, 866-9, 1243-4); beyond this point there is no substantial cooling effect, for the expanded gas absorbs little or no heat (R. 1196). Thus, on the assumed valve adjustment, the freezing compartment will have the desired below 32° F, but the cooling compartment will either frost (if liquid refrigerant gets to the coil in that compartment) or not be cooled (if the liquid refrigerant is not permitted to get as far as the coil in that compartment).^{*} (ii) Suppose, alternatively, the pressure is set, by adjustment of the expansion valve, to evaporate refrigerant at above 32° F to avoid dehydration in the cooling compartment. A like temperature will then obtain in the freezing compartment, in which event the frozen storage will be lost, for above 32° F will not freeze ice cubes or provide frozen storage.

In short, no adjustment of the expansion valve in Anderson can provide, simultaneously and continuously, dry cold in the freezing compartment and moist cold in the cooling compartment. Defendants desperately seek to rely on an adjustment of the expansion valve in Anderson which will give dry cold only, or moist cold only, throughout his refrigerator, and to conceal the indisputable fact that no

^{*} The thermostat in Anderson's cooling compartment can turn the machine off before the cooling compartment temperature reaches 32°F; but, while the machine is not turned off and liquid refrigerant is evaporating in the coil in the cooling compartment, that coil surface will be at below 32° F, and therefore pumping moisture from the air and food in the cooling compartment (R. 518, 1192, 1265). Once moisture is pumped out of foods, it is not replaced on a defrost cycle, so even periodic frosting must be prevented (D. Ex. 106, Larkin Pat. p. 3, Col. 1, lines 11-14), which Potter did.

adjustment of his expansion valve will provide moist cold and dry cold *at the same time*.

As defendants implicitly recognize (at D. Br. 30, first par.), they cannot show that Anderson anticipates unless they can show that Anderson used extended surfaces on the coil in the cooling compartment to get a surface temperature above 32° F at the point where refrigerant is evaporating at below 32° F. Undaunted, they endow the section of the Anderson coil in the cooling compartment with *imaginary* extended surfaces, without any support whatever. Thus they point (*ibid*) to the fact that Anderson's cooling compartment has a greater *length* of the coil than his freezing compartment and hope to mislead the Court into confusing coil length with extended surface. A longer coil, unlike an extended surface *on that segment of coil* where the liquid is evaporating, does not concentrate heat *on that segment* to produce a higher coil surface temperature than the temperature of the refrigerant evaporating within it. Then they say (*ibid*) the coil is "mounted against" the metal lining and "adjacent" a wire netting, of Anderson's cooling compartment, making this metal liner and wire netting an extended surface. There is *no proof whatever*, in the Anderson patent or elsewhere, that Anderson's metal liner or wire netting is in *tight thermal contact* with the coil. That is necessary to provide an extended surface (R. 621-2). On the contrary, Fig. 2 of Anderson shows the whole coil as an independent structure, not in thermal contact with any heat exchange structure for the cooling compartment. Anderson, unlike Potter, shows no means of concentrating heat at the segment of the duct (for the cooling compartment) where below freezing refrigerant evaporates.*

* In Anderson the thermostat had to be in the cooling compartment to shut off the machine before the food therein, already dehydrating because of a frosting coil, was completely ruined by a compartment temperature below 32° F. Potter provided greater flexibility in the use of the thermostat: since the extended surfaces could be relied on to prevent these undesirable phenomena, the thermostat could safely be placed in either compartment according to other factors bearing on efficiency and economy.

Despite defendants' denial (D. Br. 25) we believe the witnesses were in agreement that the Anderson coil had to frost (References in P. Br. 20). Thus Bommer testified (R. 626) that Anderson, unlike Potter, had to be defrosted. Defendants offer no proof to the contrary and the burden was theirs. In any event, the Anderson patent itself negates anticipation. Had Anderson obtained two different *coil* surface temperatures continuously and simultaneously, or otherwise solved the humidity problem, *he would have said so*. His patent is completely silent on the problem. Anderson failed, entirely, to anticipate any invention of the Potter patent (R. 624, 824-6).

(b) Davenport

Davenport patent No. 1,726,344 (D. Ex. 107), like Anderson, (i) is completely silent on the humidity problem and makes no attempt to solve it and (ii) makes no disclosure of or claim to two different *heat-exchange surface* temperatures, simultaneously and continuously, one below 32° F for the freezing compartment and the other above 32° F for the cooling compartment. The only record reference defendants give (D. Br. 36), in an effort to show the contrary, is the patent itself, page 3, lines 13 and 14. But the patent, in speaking here of "ordinary refrigerating temperatures," is plainly talking about the ordinary compartment temperatures in the conventional household refrigerator; namely, above 32° F in the *air* of the cooling compartment but below 32° F *at the heat-exchange surfaces, with consequent frosting of the coil and dehydration of the food in said compartment*.*

* More precisely, Davenport used the phrase "ordinary refrigerating temperatures" to refer only to the temperatures of the air in the compartment *and not at all to extended surface temperatures*. This is shown by the context in which the phrase occurs (p. 3, lines 6-17). The sentence in question refers to the "*chamber* from which heat is to be extracted" and suggests how to "secure" an economical "contact area for heat removal to maintain ordinary refrigerating temperatures". Maintain them where? Obviously in the "*chamber* from which heat is to be extracted". (Underscoring supplied).

In fact, Davenport filed patent (No. 1,731,711, D. Ex. 109) "as an improvement and further development" (p. 1, lines 20-26) of No. 1,726,344 ("Serial No. 105,372"), based upon the very fact that the cooling evaporator of No. 1,726,344 *frosts*.^{*} The entire substance of his "development" of 1,726,344 is that during "de-frosting" "the frost is there-upon automatically transferred . . . to the freezing element . . ." (id. at p. 2, lines 81-94).^{**} Moreover, Davenport *after* applying for Patent No. 1,726,344 applied for another patent (No. 1,769,112, D. Ex. 101) in which he stated that it was "impossible" to do what Potter actually did; *viz.*, use only a single below freezing evaporating temperature and get balanced above and below freezing heat-exchange surfaces.

Defendants' defense of anticipation by Davenport is not only wholly unsupported, but is reduced to the absurdity of asserting that Davenport had done what he himself later said it was impossible to do.

Defendants (D. Br. 37) quote the axiom from *Knapp v. Morss*, 150 U.S. 221, 228:

"that which infringes, if later, would anticipate if earlier"

and characterize the Potter patent as "a desperate effort to reclaim its [Davenport's] monopoly" and the "monopoly of Anderson" (D. Br. 38, 25 note). But neither Anderson nor Davenport could possibly infringe any claim of Potter, for neither has "a humidity whose relative value is at least 100% at 32° F"; nor any "heat-conducting surfaces within said cooling compartment constructed and

^{*} There is no extended surface unless the total heat exchange area exposed to the air to be cooled exceeds the area of that portion of the evaporator which carries the refrigerant. There is no proof that this is so of Davenport's "extended element", which is not different in principle from Anderson's lengthened coil (*supra*, p. 5). Despite Davenport's own admission of frosting, defendants have the temerity to imply that "extended element" means the same as "extended surface" (D. Br. 35, 36). An extended element serves Davenport's objective (maximum heat absorption in minimum cubic space) but not Potter's.

^{**} No. 1,731,711 (p. 1, line 53) also describes No. 1,726,344 as "utilizing the vapor-gas principle" (not the single refrigerant principle of Potter).

arranged to maintain . . . a temperature above 32° F'' (Potter patent, all claims). Equally clearly, there could be no such infringement, by Anderson or Davenport, of claims 3 and 4 of Potter which call for "insulation around said cooling compartment offering less resistance to flow of heat thereto" than around the freezing compartment co-acting with "a thermostat responsive to the temperature in said cooling compartment."

Had defendants' devices followed the expired Anderson or Davenport patents, they would not infringe Potter.

The Defense of Lack of Invention Is Unsound in Fact and Law

Our main Brief (2-7, 11-12, 15-44, and 74-76) shows in detail, that the four claims of the Potter patent defined a new combination which for the first time provided a practical, dual humidity household refrigerator, avoiding manual defrosting, and which fully satisfied all the applicable standards of invention. Contrary to defendants (D. Br. 15-16, 34), this is no "shift" from our position at the trial (see record references in P. Br., Appendix B, points 1, 2, 3, 6). Defendants quote Mr. Parker out of the context (R. 851-2) where he pointed out that it was "not . . . proper to say that his [Potter's] improvement over the art consisted merely in" "providing the coil in the cooling compartment with fins". Fins are only one form of extended surface for a non-frosting coil which is only one element in the Potter combination (R. 1232, 986, 940-1, 761, 128, 153, 192-3). Defendants do not even attempt to show lack of invention with respect to claims 3 and 4. As to claims 1 and 2, their points (D. Br. 38, 43-46, 50-56, 70-71) are plainly not well-taken.

In substance defendants' position boils down to the following assertion: the Potter advance over Anderson or Davenport was not beyond the skill of the ordinary mechanic in the refrigeration field, "particularly in view of the Larkin patent" (D. Br. 38-43).

If the advance was obvious, why did not Anderson or Davenport or anyone else of the many refrigeration engineers make it? Why did such skilled workers as Lundgaard

(D. Ex. 110), Curtis (D. Ex. 101) and Barnes (D. Ex. 101) use air as the medium? The industry was so aware of this need that the Food Council of America was organized to defend dry cold (P. Br. 18-19) or cure it for all electrical refrigeration manufacturers. It was so far from being obvious, that Davenport, holder of many refrigeration patents, said that under the limitation of "a constant temperature-pressure level" for evaporation of a volatile refrigerant, "it is impossible to produce differential refrigerating effects with a single pump" (D. Ex. 101: Patent No. 1,769,112 [in Exhibit Book], p. 1, col. 2, lines 69-89). Since this is just what the Potter patent did *defendants are in the position of asserting that an advance over the prior art is obvious although that prior art taught that said advance was impossible*. Potter's reversal of prior thinking in the art, alone demonstrates invention. See *Pointer v. Six Wheel Corp.* 9th Cir., 177 F2d 153, 161, where this Court said of the inventor "*He was an innovator not a follower*".

The Larkin patent* in no wise helps extricate defendants from this absurdity. In the first place, the Larkin patent was on a single compartment refrigerator. *It taught nothing about maintaining moist cold and dry cold simultaneously and continuously in a unitary machine*. Secondly, it was based on a float valve or flooded system (p. 2, col. 1, lines 44-47) in which, unlike a direct expansion system such as in the Potter patent (Potter patent, col. 5, lines 16-19; R. 1264-5), the pressure-temperature level at evaporation is not fixed (R. 1281, 518, 1192, 1265). So Larkin taught nothing about how to get differential refrigerating temperatures or humidities *where the refrigerant is kept at a constant pressure-temperature level of evaporation* as in the Potter patent. Starting with this fixed point, Potter balanced different heat-exchange surfaces to get the novel correlation of three elements necessary for the novel result (P. Br. 26).

* The Larkin patent and Davenport patent No. 1,726,344 were not cited against the Potter application, since, as stated in *Artmoore Co. v. Dayless Mfg. Co.*, 7 Cir., 208 F. 2d 1, 4, "they were considered and cast aside because not pertinent". (Davenport was distinguished in the *Stewart-Warner* case).

Because maintenance of moist cold and dry cold, simultaneously, with only a volatile refrigerant evaporating at below 32° F. in a direct expansion system, was for years a recognized, unsolved problem prior to the invention of the Potter patent, (P. Br. 17-28; 74-76), *the facts of history conclusively show that the invention was not obvious*. The cases (P. Br. 38-41) fully support this proposition. Defendants wholly fail to meet and misinterpret these authorities. Defendants' argument (D. Br. 70-71) that the Potter patent was not a "commercial success" is no answer and wide of the mark. That the technical problem was recognized and that skilled engineers sought to solve it—unsuccessfully—until the Potter patent taught the industry the solution, sufficiently show lack of obviousness.

There is no question that the Potter refrigerators had an important impact on the industry. Plaintiff's Ex. 3KKK in the exhibit book, is a market acceptance survey comparing the patented refrigerators with others then (1935) on the market. There is the testimony of the G. E. people as to the impact on the two largest refrigerator manufacturers. See our Brief pp. 28-30. Admiral alone is here shown to have received over \$40,000,000.00 for refrigerators embodying the invention of the patent, *during its short five year life* (R. 396-7, 564-5, 704-5, 714, 1048).

The Potter patent taught the industry the solution, and the industry had the commercial success. The Potter invention has become a "must" as a type of household refrigerator (R. 710). Defendants' position amounts to saying no more than if they can avoid paying for a license and the patent owner is driven out of business, there is no commercial success attributable to the invention so appropriated. This is sheer nonsense.

Defendants state (D. Br. 43-46) that the Potter patent does not meet the *A. & P.* test, but they blithely ignore plaintiff's detailed record analysis (P. Br. 24-28) and the cases (P. Br. 30 *et seq.*) showing that *the Potter patent taught a new combination comprising a new structure having a new mode of operation and function and achieving long sought new results*. (*Supra*, pp. 1-2; P. Br. 25 *et seq.*)

Defendants' cited cases do not support their position. Thus the *Refrigeration Patents* case (D. Br. 45-56), upheld the *invention* here but held the now surrendered original claims defective on the ground of functional statement (see opinion of this Court, 217 F. 2d at 40). We do not understand the point of the dictum quoted. Clearly, a "non-frosting coil" is an element like a thermostat or a valve. No-defrosting like no-dehydration is the beneficial result. That it can be *made* to frost, by maladjustment of the expansion valve, does not (contrary to D. Br. pp. 32-56) make the non-frosting coil a result (See R. 224).

The *U. S. Air Conditioning* case (D. Br. 46) is altogether different from our case on the facts and states no rule inconsistent with plaintiff's position. *Berkeley Pump v. Jaccuzzi* was discussed in our main Brief (P. Br. 38) and defendants have not expressed any disagreement with the accuracy of that discussion. In that case, two separately operable pumps were operated together; whereas (contrary to D. Br. 46) Potter did not aggregate separately operable freezing and cooling compartments. The Potter patent combination is a single novel heat "pump" for accomplishing the dual function of providing continuous moist cold and continuous freezing and eliminating the need for manual defrosting. Potter, unlike *Jaccuzzi*, solved a recognized industry problem (P. Br. pp. 19-22, 28-30).

Defendants, relying on hindsight, have plainly mistaken simplicity for obviousness. *Patterson-Ballagh Corp. v. Moss*, 9th Cir., 201 F. 2d 403, 406. The Potter patent was not obvious. Obtaining incompatible (above 32° F. and below 32° F.) heat exchange surface temperatures with the same refrigerant evaporating at well below 32° F. involved subtle interrelation of factors and represented invention of a high order. The very simplicity of the principle in operation speaks well for it as a genuine advance beyond ordinary skill, *Flakice* quoted in our Brief (P. Br. 40).

The Defense of Non-Disclosure Is Untenable

This defense is predicated wholly on the false premise that the invention claimed is the *fin*, whereas the invention

is for a *combination*, one of whose elements was an extended surface, or non-frosting coil (a radial fin coil being only one exemplification of such element) (D. Br. 47-49, 50). We submit that our discussion of the disclosure point (P. Br. 44-49) has been wholly ignored in defendants' Brief because they have no answer to it.

The Defense of Functional Statement Is Sham

This defense of functional statement of claims (D. Br. 49-50) is not in the case any more, since defendants expressly abandoned it below, before the case went to the jury (R. 1489). We presume defendants withdrew the defense because even they recognized that it was unsound under *Faulkner v. Gibbs*, 338 U. S. 267 and §112 of the Patent Code, as applied to the combination claims of the reissue patent. Their unwarranted attempt at this late date to slip the defense back into the case further serves to show their irresponsibility and bad faith.*

The Defense of Vagueness of Claims Has No Substance

The defense of vagueness of claims is stated (D. Br. 50) without any particularization whatever. Our discussion of the point (P. Br. 49-50) is simply ignored by defendants as they have no answer to it. The invention was claimed clearly and precisely. It was neither a fin nor a brine tank *per se*.

Late Claiming Was Properly Rejected Below

This defense of late claiming, properly rejected by the District Court,** is based on three misconceptions: (1) the applicable law, (2) the date of first commercial sale of a refrigerator embodying the invention, and (3) the earliest filing date plaintiff is entitled to.

* The claimed element is a non-frosting coil "construction" and "arrangement" (not a result), properly specified in its relation to the novel assemblage of parts (R. 865-6, *supra*, p. 11).

** The *General Electric* decision, on motion as to only claim 11 of the original patent, was based upon no facts like those of record here. Also, that claim was surrendered in 1948. See the record on the former appeal, pp. 85-9.

(1) Under *Muncie Gear v. Outboard*, 315 U.S. 759, a claim is not invalid for delay of over two years in presenting it (under the law applicable to our case) after a public sale or use of the device of the claim, when, as here, the first *disclosure* was made to the Patent Office within that period. It is the disclosure date that counts.*

Such disclosure is sufficient if an apparatus be clearly so shown, by the specification and drawings, as to have a certain operating characteristic not named or mentioned in the specification. *Bickell v. Smith-Hamburg-Scott*, 53 F. 2d 356, at 358 (C.A. 2). An amendment to the specification is justified by reference to the first drawing, for as stated in *Wagenhorst v. Hydraulic Steel*, 27 F. 2d, 27, 31 (C.A. 6):

“What clearly appears by a drawing though not fully described may be a sufficient disclosure (citing cases). To insert by amendment a fuller description of what completely appears by the original drawing and was intelligibly described is not to insert new matter (citing cases)”.

The defendants have the burden; and the administrative determination of the Patent Office in allowance of an amendment without objection to it as containing new matter, is entitled to great weight in this connection. *Bickell, supra*.

(2) Defendants (D. Br. 57) cite the testimony of Bade, given from unaided memory, that the “Barry box” was sold in June, 1930. But defendants ignore the documentary evidence that Potter was not billed for work done in construction of the “Barry box” until November 20, 1930 and December 18, 1930 (R. 297-298). Bade’s unassisted memory was clearly faulty in placing the *sale by* Potter six months

* *Accord: Jacquard Knitting Machine v. Ordnance Gauge*, 95 F. Supp. 902, 108 F. Supp. 59, 213 F. 2d 503 (C.A. 3). See also: *Proctor and Gamble Mfg. Co. v. Refining Inc.*, 135 F. 2d 900, (C.A. 4); *R.U.V. Engineering Corp. v. Borden Co.*, 170 F. 2d 688, (C.A. 2).

prior thereto. The dates of the bills support Potter's testimony, also ignored by defendants, that the Barry box was built about October 30, 1930 and that, since the "Barry box" stayed on Potter's floor for a long time after it was built, it was not sold until about October 1931 (R. 300-301).

(3) Thus the only sale defendants point to was well within two years of December 2, 1932 when defendants admit (D. Br. 57) a "non-frosting" coil was mentioned. A "non-frosting" food storage compartment is named in the originally filed specification (D. Ex. 101, p. 16). Disclosure adequate to support claims 1 and 2 of the reissue patent in suit was clearly made in the very first application for the original patent, which application was filed February 16, 1931 (D. Ex. 101, p. 1). See also P. Br. 44-49.

With respect to claims 3 and 4 of the reissue patent the drawings in that first application clearly showed less insulation around the cooling compartment than around the freezing compartment with the thermostat actuated by the temperature in the former. The specification, therein, described the said operation of the thermostat, (D. Ex. 101, p. 5). The original specification stated: "Any suitable insulating material 33 is employed in the construction of the cabinet. The relation of the various compartments may of course be varied." (D. Ex. 101, p. 6). These words were replaced by the clarifying and amplifying description indicated on D. Ex. 114M, see R. 1202. The "relation" referred to, in connection with the diagram can only be the proportional thickness of insulation. The specification as originally filed also teaches that "the efficiency of the freezing unit will be increased as the rate of heat pumping from the food compartment increases" and that "the more the cooling compartment is used the greater will be the efficiency of the cold storage and freezing compartments" (D. Ex. 101, pp. 3, 7). Originally filed claim 5 specified "control means actuated by temperatures in said cooling compartment" (D. Ex. 101, p. 8). See also claims 8, 10 and 12.

Less insulation around the food (i.e. cooling) compartment increases the heat pumping because the thermostat

is responsive to temperatures in the cooling compartment. Thinner insulation compensates for periods of decreased use of the cooling compartment to assure against too high temperatures in the freezing compartment. Plainly, the original application as filed in 1931 taught this operating characteristic now claimed in claims 3 and 4 and fully explained in the specification of the reissue patent. It was not taught by any prior art*; namely, the effective coaction of a thermostat directly actuated by the cooling compartment with proportionately *thinner insulation* around said compartment than around the freezing compartment.

In sum, the defense of late claiming requires defendants to prove affirmatively *both* the date of public sale and the date of disclosure. We submit that *neither* has been proved. Additionally, the administrative decision of the Patent Office holding the fuller description to be not new matter, is presumptively correct and the patent is entitled to its filing date of February 16, 1931 for the explanations added in 1934.

The Defense of No-Infringement Fails

The mere fact that a claim "reads on" an accused device or a prior art device does not determine infringement or validity. See *Himes v. Chadwick*, 199 F. 2d 100, 103 (C.A. 9) and *Bianchi v. Barili*, 168 F. 2d 793, 799 (C.A. 9).

The use of words in parallel columns in defendants' exhibits and brief to show alleged non-infringement and alleged anticipation is not helpful—"the letter killeth but the spirit giveth life", *Bianchi, supra*.

This is the very basis for the doctrine of what is an equivalent, concisely stated in *Graver Tank & Mfg. Co. v. Linde Air Products Co.*, 339 U.S. 605, 608:

* Defendants' note (D. Br. 57) refers to Davenport patent No. 1,769,118, Fig. 1, which describes a layer of cork board around freezing *element* 9, but not the freezing compartment C (p. 2, lines 71-6) and which uses no thermostat. Defendants also argue that Anderson has a "difference in heat leakage" because of wall areas. This is not a difference of insulation.

“If two devices do the same work in substantially the same way and accomplish substantially the same result they are the same, even though they differ in name, form or shape.”

The testimony of Mr. Parker respecting infringement is so specific and informative, that we refer the Court particularly to Mr. Parker’s testimony at R. 798-820; 886-904; 928-935; 938-941; 1346-1367; 1375-1379.

The admissions of defendants in their service manuals and in the Morton patent covering the accused structures support Mr. Parker’s testimony. The points of disagreement between the expert witnesses are graphically shown by the circles marked on D. Exhibits 114-A through 114-R, copies of which are in the exhibit book.

(1) Cold Wall

We show that the accused structures had the same means, operation and result as the Potter patent.

Whether cold wall is a different type from a finned type expander is not the point. They were both known means of extending the coil’s heat-withdrawing surface (R. 904-5). Nothing in defendants’ brief, pp. 58-70, establishes otherwise. Nor do defendants show any difference in mode of operation or result from the extended surfaces of the Potter patent which is not limited to any particular type of extended surface.

What the patent taught and claims is precisely embodied in the accused refrigerators; namely, two compartments cooled by differently constructed heat exchange surfaces maintained above and below freezing but operated on a single below freezing refrigerant from a single liquefying unit.

In D. Br. Plate V* defendants use the single letter “C” to mask what are in fact *two coils in series*,** one thermally in contact with the liner of freezing compartment A, the other, below and thermally in contact with transfer plates

* A perversion of P. Ex. 8A-1 upon which Parker marked the parts with the reference numbers of defendants’ Morton patent.

** Numbered 100 and 102 respectively in Morton patent 2,586,853, see fig. 4.

H and G to withdraw heat from the cooling compartment B. Heat is collected by the liner of B and coils D and focused through G on that part of Coil C which is attached to primary plate H. The whole system: B's liner, D and G, shown separately at left, is well coupled thermally to primary plate H and its section of coil C. That system is merely an elaborate fin or extended surface for the cooling section of duct C attached to plates G-H which are insulated from and positioned vertically (not "horizontally" as defendants state) well below the freezing liner A. Thus, plates H and G and their associated circuit D, are coupled to liner of B which is the heat exchange surface of the section of duct C for the cooling compartment. This section of C for cooling is in series with the section of C for freezing, just as are Potter coils 25 for cooling and 22 for freezing.

So the inventive concept is embodied in the accused devices, just as it is claimed and disclosed in the patent in suit. All claims call for heat exchange surfaces above and below freezing. These are defendants' two liners B and A which function as heat exchange surface extensions for the respective, separately insulated* sections of duct C, which are in series and contain the sole refrigerant which "withdraws" any heat from the accused refrigerators (R. 792-5). The separate secondary circuit itself withdraws no heat from the cooling compartment, just as radial fins *per se* withdraw no heat. It must be operated on a controlled refrigerant expanding and condensing system, of course, to dissipate heat outside of the insulation. Defendants' secondary just cannot by itself do that.

At the trial, and now in their Brief (D. Br. 60 *et seq.*), defendants played upon the words of all claims that the expanders for both the cooling and freezing compartments must have heat conducting surfaces "*within*" said compartments and contended strenuously that neither of defendants' liners was so "*within*" their respective compartments. A special interrogatory was framed and this point was

* D. Br. plate IV shows insulation separating the two sections of coil C, which makes these sections two separate coils in series, as in Potter.

expressly overruled by the jury's answer. The trial Judge's opinion accepted the jury verdict on this point by failing to state the contrary. Plainly any surface extension which is "within" the protecting insulation is within the refrigerated compartment. Insulation is the outer boundary of such compartment.

There is nothing "fantastic" about Mr. Parker's clear and detailed testimony showing infringement by defendants' accused devices (R. 779-826). It was subject to the most searching cross-examination, and never answered by Muffly. The scattered record references (D. Br. 59-65) are highly misleading as examination will show. Basically, defendants confuse bare duct or tube surfaces with Admiral's extended heat-exchange surfaces. As Admiral's Morton said at R. 986:

"Q. Your liners are a so-called secondary heat-exhausting surface, are they not, in the Admiral Model 1090 and later models?"

A. In the same way that a floor is a secondary surface in a floor-heated building."

(2) The Liquefying Unit

Our main Brief (P. Br. 53-57) demonstrates that the accused structures had but a single liquefying unit *of the kind defined in the claims of the patent in suit*. Defendants' discussion (D. Br. 66-68) wholly fails to meet plaintiff's analysis, and is misleading because defendants do not quote the complete claim element in question (cf. D. Br. 66 with P. Br. 55).

The accused refrigerators, like the Potter patent, embody separate, but in series, coils (i.e. the two sections labelled C by defendants attached respectively to A and H—see above pp. 16-17) for the same liquefied refrigerant, which is expanded by heat extracted from both compartments by means of which dual humidities are maintained.

The separate refrigerant in coil D is liquefied by operation of the *primary* circuit to cool plate H and that section of coil C attached to H. Heat collected by the cooling com-

partment extended heat exchange surfaces is extracted through but not by G. That is done by the whole primary system, which also extracts heat from the freezing compartment to the outside atmosphere. Such heat is dissipated by the liquefying unit E, F which alone satisfies the language of the claims.

The Defense of No-Rational Basis for Damage Verdict Fails to Meet Plaintiff's Contrary Showing

While defendants assert (D. Br. 72-3) that the damages found by the jury were without rational basis, we submit that they have clearly failed to meet plaintiff's contrary detailed showing in its main Brief (P. Br. 57-64, 74-76). Anderson, Davenport and Larkin notwithstanding, the Potter patent was a brand new idea in refrigeration: a practical, dual-humidity household refrigerator, with no manual defrosting, which Admiral appropriated and used for over 40 million dollars of sales, in only a five year period.*

Admiral's Infringement Was Wilful

That Morton, Stewart-Warners designing mastermind, was deliberately used by Admiral with Muffy's aid, to come even closer to Potter than the Stewart-Warner infringement, is a sufficient reply to defendants' section VI (D. Br. 73-75). He testified, R. 1002-3:

“Wasn't it a fact, Mr. Witness, that the Potter two-temperature refrigerating system spurred the interest of Stewart-Warner in this two-temperature refrigerator field? Don't you know that is a fact?”

* * * *

“A. I can answer the question on the basis that at no time do I recall anyone at Stewart-Warner bringing up any other two-temperature refrigerator in development.”

* That this was the principal feature relied on by Admiral see R. 1048.

The facts are adequately stated in our Brief, pp. 64-66. The reference to Mr. Siragusa's claim to Admiral's "respect" for patents is refreshing in the light of his company's history in the courts. See that part of his cross-examination at R. 1029-30. See also *Hazeltine v. Admiral*, 7th Cir., 183 F. 2d 953, cert. den. 340 U.S. 896, and 916.

The Bad Faith of the Defense

The bad faith of the defendants' defense (P. Br. 66-68) is further shown on this appeal by their seeking to raise the defense of functional statement of claims here although they had already withdrawn this defense.

CONCLUSION

Defendants have simply ignored our showing (P. Br. 68-70), from the governing authorities and the record, that: (1) a conditional order for a new trial, like a judgment n.o.v. is reviewable for *error of law*; (2) the conditional order entered below for a new trial, like the judgment n.o.v., was vitiated by error of law; and (3) with respect to said conditional order, either no discretion was sought to be exercised, *because the opinion below gave only law grounds for the action taken by the trial Judge*, or, in the alternative, the aforesaid error of law included clear abuse of discretion. *The record so fully supports the verdict that setting it aside was arbitrary and capricious.*

The judgment N.O.V. should be reversed and the verdict reinstated, with treble damages against Admiral, and costs, including attorneys' fees, in this Court and the Court below, awarded plaintiff-appellant.

Respectfully submitted,

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